From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: jmartin@hrlban1.aircrew.asu.edu Subject: ...back to the future, con'td.

Message-ID: <SA39+D9ueka@hrlban1.alhra.af.mil>

## Larry Keith wrote:

- 1. Find a 350 watt light bulb.
- 2. Carefully remove the base.
- 3. Fabricate grid and plate assembly.
- 4. Install grid and plate assembly..
- 5. Reinstall base into globe.
- 6. Exhaust all that air...

etc.. etc...

\_\_\_\_\_\_

If only it were that easy. Do you suppose one could make a 'beam power tube' using a headlamp? (OK, stop throwing tomatoes.) Seriously, I still plan to try my hand at making simple tubes in the not-too-distant future. 73, John Martin

jmartin@hrlban1.aircrew.asu.edu

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: rbsingl@rs6000.cmp.ilstu.edu (rodger singley)

Subject: ...back to the future, con'td.

Message-ID: <9511162109.AA222582@rs6000.cmp.ilstu.edu>

Or instead of making tubes, how about making or rebuilding old electrolytics as it is becoming more difficult to find perfect matches (at least cosmetically). Seems this amateur chemistry would take less skill than building a tube!

Rodger WQ9E

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>

Subject: Re: ...back to the future, con'td.

Message-ID: <199511162113.PAA12803@dlep1.itg.ti.com>

At 02:47 PM 11/16/95 -0600, John Martin wrote:

>If only it were that easy. Do you suppose one could make a 'beam power >tube' using a headlamp? (OK, stop throwing tomatoes.) Seriously, I still >plan to try my hand at making simple tubes in the not-too-distant future.

I wonder why the Chinese make such lousy common, non-exotic tubes as the 6V6

and 6146? Could it be that some of the manufacturing processes come close to being an art form? (And one that's largely been lost.)

Regards, Bill Sorsby, N5BU

bill.sorsby@dlep1.itg.ti.com

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: nielw@ix.netcom.com (Niel Wiegand)

Subject: Re: Archived Ham Magazines?

Message-ID: <199511160259.SAA05946@ix6.ix.netcom.com>

You wrote:

>

>Greetings,

>

>Does anyone know whether QST, CQ, 73, Ham Radio, etc. are available in >archived form, such as microfiche?

>

> Bill.

I bought a set of the Buckmaster microfiche a few years ago. I only use them as a very distant last resort. The microfiche process is a high contrast process. Any photos in the magazines are just about useless. It's also pretty hard to settle down in the easy chair and flip through a few back issues if all you have is microfiche.

Find real magazines if you can. If you are lucky get ones that have been hardbound. This really saves them from wear and tear.

The other thing I like is a good index. I found FBTO on 3.5 or 5.25" disk. Call them at 1-603-878-3628 to find out about their index of all QST, Ham Radio, CQ and 73 magazines since 1945.

73, Niel - WA5VLZ

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: Michael Covington <mcovingt@ai.uga.edu>

Subject: Back to the future...

Message-ID: <199511162127.QAA05445@aisun6.ai.uga.edu>

How about homemade semiconductors? Diodes (of low quality) aren't too hard; I seem to recall that Wireless World in the 1950s had an article about a homemade transistor. Maybe I'll go look at it...

- -

Michael A. Covington Artificial Intelligence Center The University of Georgia Athens, GA 30602-7415 U.S.A. From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: paul Veltman <veltman@netcom.com>

Subject: Re: Back to the future...

Message-ID: <Pine.3.89.9511161407.A16743-0100000@netcom5>

Homemade semiconductors, thats EASY. When I was a kid, we made one "semiconductor" receivers. Just take a hunk of Galena crystal and a piece of wire and hook it up. Voila, a "homemade semiconductor" receiver. :-)

## Paul WA60K0

- > How about homemade semiconductors? Diodes (of low quality) aren't too
- > hard; I seem to recall that Wireless World in the 1950s had an article
- > about a homemade transistor. Maybe I'll go look at it...

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

Subject: Re: Back to the future...

Message-ID: <Pine.ULT.3.91.951116165009.22734A-100000@admin.aurora.edu>

On Thu, 16 Nov 1995, Michael Covington wrote:

- > How about homemade semiconductors? Diodes (of low quality) aren't too
- > hard; I seem to recall that Wireless World in the 1950s had an article
- > about a homemade transistor. Maybe I'll go look at it...

Yeah, wasn't there a project using nails stuck in a potatoe ???????

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: haynes@cats.ucsc.edu (Jim Haynes)

Subject: Re: back to the future?

Message-ID: <199511161910.LAA20156@hobbes.UCSC.EDU>

The new QST also has an article about making a table lamp from an old big tube. Seems like that was a recent topic on this mailing list.

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: lakeith@wrdis01.robins.af.mil (Larry Keith)

Subject: Re: back to the future?

Message-ID: <199511162020.0AA24203@wrdis01.robins.af.mil>

In your message of 16 Nov 1995 at 1323 EST, you write:

> The new QST also has an article about making a table lamp from an old
> big tube. Seems like that was a recent topic on this mailing list.
>

How about an article on how to make a real tube from old light bulbs? That's the one that I want to read..

- 1. Find a 350 watt light bulb.
- 2. Carefully remove the base.
- 3. Fabricate grid and plate assembly.
- 4. Install grid and plate assembly...
- 5. Reinstall base into globe.
- 6. exhaust all that air...

etc.. etc...

73,

Larry, KQ4BY

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: pbock@melpar.esys.com (Paul H. Bock)

Subject: Re: back to the future?

Message-ID: <9511162127.AA26083@syseng1.se.melpar.esys.com>

>> The new QST also has an article about making a table lamp from an old
>> big tube. Seems like that was a recent topic on this mailing list.
>>

>How about an article on how to make a real tube from old light bulbs? >That's the one that I want to read..

>1. Find a 350 watt light bulb.

<snip>

Or, read the paragraph in "200 Meters and Down" about the young ham of impoverished means who built a complete station by hand, including using discarded bottles from a pharmacy for his tube envelopes. Everything in his station was handcrafted from junk, trash, etc., including winding his own earphones, transformers, etc. The only thing he spent money on was a pair of utility pliers and a second-hand vacuum pump.

This was in the late '20s, and according to those who saw his station it was astonishingly well-crafted, efficient and highly functional.

Talk about a REAL\* homebrewer.....

73,

Paul, K4MSG

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: k1zat@bah.com

Subject: Boatanchors Milestone

Message-ID: <Pine.SUN.3.91.951115222837.21183A-100000@booz.bah.com>

Hey (reflectormeister) Jack --

Congrats on the little piece in the Dec QST on page 83. Well done. I remember that humble beginning.

jd

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: Sandra L Knepper <slkst29+@pitt.edu>

Subject: COLLINS

Message-ID: <Pine.3.89.9511160714.B26013-0100000@unixs5.cis.pitt.edu>

I would like to purchase the following items:

Pre-WWII Collins equipment

Collins Signal magazines (or to copy)

Power supply for the Hallicrafters SR-2000 or a complete station

I have for trade if you would prefer equipment:

32V-3, 32V-2, 30L-1, KWM-2A with PM-2, 312B-5 51J-4, 51J-3,

Also Collins Parts.

Thank you.

Dave, W3BJZ

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: David Stinson <72227.1640@compuserve.com>

Subject: Command Set Models

Message-ID: <951116124005\_72227.1640\_EHM81-1@CompuServe.COM>

Another user and I have been discussing the three different series of Command Set units. I'm sending this excerpt to the list for general information.

There are three series of what are commonly called "Command Sets" or "ARC-5" equipments:

Army SCR-274-N series (BC-441 to 459 stuff):

Finish: Natural aluminum or (scarcer, earlier) black wrinkle.

Upside: Easier to find. Parts less expensive.

ATA/ARA units will "plug-n-play" in the same rack.

Downside: No 160 meter units in Army models.

Few "cool" oddities built for use with Army.

Early Navy ATA/ARA series:

Finish: Black wrinkle only.

Upside: Prettier then Army. Army units will "plug-n-play"

in the same rack. 160 meters is available.

Downside: Pieces much harder to find.

( I have never seen an ATA/ARA rack or modulator)

Late Navy AN/ARC-5 R-xx/T-xx series:

Finish: Black wrinkle only.

Upside: Prettier then ATA/ARA. Shunt-fed plates.

Slightly better construction.

Lots of "cool" oddities to collect.

Downside: Racks not compatable with any other series.

Accessories harder to find then Army and

more expensive. Examples:

Army modulator-\$50+, Navy \$70+.

Army DM-32 Rx dyno \$15, Navy DY-2 \$20+ (later-model replacements for the DY-2 still available from Fair for \$12, I think)

73 Dave AB5S/7

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: Steve Linscott <linscot@is.rice.edu>

Subject: Friday Night Session

Message-ID: <199511161610.KAA15043@is.rice.edu>

I just rebuilt the power supply for my Bendix TA-12C, and it appears to load up the 66 foot wire in my attic. Is there a "happening" on 80 meters this Friday? What are the times and freqs? Thanks.

73 de W5EGP

- Steve -

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: WJoeW@aol.com Subject: FS: Tek 543

Message-ID: <951116002512\_23858230@mail04.mail.aol.com>

I have for sale a working Tektronics 543 with a CA plug-in installed, an extra CA, an L plug-in, manuals for all, no probes. I will sell all for \$50 plus shipping from Oklahoma City area.

Joe

wjoew@aol.comI

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995
From: pbock@melpar.esys.com (Paul H. Bock)
Subject: FS: T-22/ARC-5 xmtr, 7-9.1 Mhz, unmodified
Message-ID: <9511161409.AA14860@syseng1.se.melpar.esys.com>

FOR SALE: T-22/ARC-5 Command Set transmitter, 7-9.1 MHz, EC, 100% complete & unmodified, \$55.00 shipped, 10-day money-back evaluation period.

E-mail for complete description to pbock@melpar.esys.com.

73,

Paul, K4MSG

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995
From: David Stinson <72227.1640@compuserve.com>
Subject: HALLICRAFTERS SX-62 KNOBS AVAILABLE
Message-ID: <951116124422\_72227.1640\_EHM81-2@CompuServe.COM>

I've found some knobs from a poor, wretched SX-62. The poor thing looks run-over by a dump truck. (I don't have the BFO pitch knob; sorry)
The plastic is rough on a couple, but the printed skirts are mostly intact and OK. One needs a scratch polished. Who needs these things?
73 Dave AB5S/7

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: BHall88620@aol.com

Subject: Herbach and Rademan Phone Number and Address Message-ID: <951116144518\_24380619@emout04.mail.aol.com>

Dear Jim:

H&R's phone number is 1-800-848-8001, and their address is 18 Canal St., PO Box 122, Bristol, PA 19007-0122.

I have CC'ed this to the BA list because even though they don't have BA stuff, they have stuff BA type folks would like. Nice surplus catalog.

73, Ben BHall88620@aol.com

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995 From: "James C. Owen, III" <owen@apollo.eeel.nist.gov> Subject: Re: Hmmm...mail volume down, why? Message-ID: <40617.owen@apollo.eeel.nist.gov>

In message Wed, 15 Nov 1995 13:20:29 -0600 (CST),
bill@texan.frco.com (William Hawkins) writes:

- > Maybe there's a lot of us that depend on Uncle Sugar for our Internet
  > connections, and they've been furloughed by the latest display of useless
  > political posturing.
- > 
  > Um, strike "useless". That's judgemental, and the next thing to a flame.
  > 
  > Bill Hawkins

Well that could be some of it. We just received notice that NIST goes on furlough effective tomorrow, Friday, for 30 days or until we're funded. I don't know if this effects the operation of WWV and I understand that they are meeting at this time to decide who will remain in a duty status. I hear it will be 1 person per division. Better set your clocks now and listen to the latest propagation reports just in case. I will suspend my mail service at the end of the day if we're instructed to shut down the mail server as I don't want Jack to get swamped with bounced mail. See you on Boatanchors sometime soon, I hope. Maybe I'll have time to bring up the DX-100B on 3885. 73 Jim K4CGY

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995 From: Jeffrey Herman <jherman@hawaii.edu>

Subject: Re: Hmmm...mail volume down, why?

Message-ID: <Pine.SV4.3.91.951116063114.11066A-100000@uhunix5>

On Thu, 16 Nov 1995, James C. Owen, III wrote: >I don't know if this effects the operation of WWV and I understand that

Our Honolulu newspaper interviewed the staff up at WWVH - they reported that operations at that site would continue as usual. I guess they're considered "essential" workers due to them relaying WX info to the Pacific.

## Jeff NH6IL

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: HAM RADIO practicing the ART OF RADIO-KA5WEC <NOEL@ocmv36.frco.com>

Subject: HQ120

Message-ID: <951116093645.2020c267@ocmv36.frco.com>

I have a Hammarlund HQ120 that I have enjoyed restoring. Found it at a ham fest for \$7 in not the best condition. It had missing tubes, the case was rusted and the dials yellowed. After all is said and done it is a beatiful radio. But I have no idea of what time period it was from . I would really enjoy finding out anything that I could on this radio.

Thanks

DW (KA5WEC)

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: QUACK <MUSCORJ@hsdwl.utc.com>

Subject: Info needed

Message-ID: <01HXPN0T1PQQ009BQ5@utrcgw.utc.com>

I need to contact Peter Q.George via e-mail or does anyone on the list know how I can contact the "Boston Computer Society?"

Ron Musco National Radio Club Director/Membership Officer

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: bill@texan.frco.com (William Hawkins)

Subject: Lesson learned from the list

Message-ID: <9511161830.AA05621@texan.frco.com>

Remember when Jack suggested we only sell a few things at a time? Well, that came right after I put 5 nice old radios up for sale. That generated 50 pieces of mail to be handled. It took all day to pack 5 boxes (the HFS required 2 boxes, the CRX-3 had no action). Tuesday I deposited some of the checks, and thought that maybe my time was rewarded after all. Then I took the boxes to Mailboxes, Etc to be packed with a new outer box and plastic peanuts (used boxes don't look like they'd make another trip). The bill was \$167, about 3/4 of what I had deposited. The shock is just beginning to wear off.

If I had taken Jack's advice, I would not have devoted a whole day to packing boxes, and I'd'a found out right away that shipping stuff to the west is not at all like shipping it to the east, from Minnesota.

No, I don't want extra money from the buyers - a deal's a deal. I wrote this to pass on the lesson learned. There is still a sense of reward that comes from the empty shelf space, that can now be used for something new and different. Something like military sideband converters, f'rinstance.

Bill Hawkins bill@bvc.frco.com 612 895-2085 Minneapolis, MN USA

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: jml@spider.lloyd.com (Jim Lockwood)
Subject: Re: Lesson learned from the list
Message-ID: <m0tGARb-000TrRC@spider.lloyd.com>

At 12:34 PM 11/16/95 -0600, William Hawkins wrote:
>It took all day to pack 5 boxes (the HFS
>required 2 boxes, the CRX-3 had no action). Tuesday I deposited some of
>the checks, and thought that maybe my time was rewarded after all. .
>The bill was \$167, about 3/4 of what I had deposited. The shock is just
>beginning to wear off.

>

I, too, have learned this lesson the hard way and can concur with Bill's experience.

I sold one of my HT-37s to a fellow in Oregon and agreed to ship it for \$25 over and above the price of the transmitter itself. I even offered, in my innocent ignorance, to refund any left over money if the shipping ran less than \$25.

What a mistake.

The shipping materials alone ran me \$22. (I double box and go to extraordinary measure to ensure a radio will survive UPS.) It took me several hours to pack the HT-37 adequately.

The shipping charges ran another \$30.

By the time the dust settled and the checks cleared, I just broke even on the deal.

What's the moral of the story, the punchline? Shipping boatanchors is astonishingly expensive if it's done right. An unfortunate corrolary to

this is probably that if it isn't expensive, it probably isn't adequate to prevent damage.

73,

Jim - km6nk

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995 From: "Gable, Edward M" <emg@rfpo2.rfc.comm.harris.com>

Subject: RE: Lesson learned from the list

Message-ID: <30ABC34F@smtpgate.rfc.comm.harris.com>

Bill wrote"

<clip>

I took the boxes to Mailboxes, Etc to be packed with a new outer box and plastic peanuts (used boxes don't look like they'd make another trip). The bill was \$167, about 3/4 of what I had deposited. The shock is just beginning to wear off.

<clip>

As I approach retirement one of the side benefits I think of often is the ability to walk 200' from my office into the coveted "dumpster" area where daily hundreds of fresh packing boxes and cubic yards of peanuts and bubble wrap are compacted into oblivion. Some don't make it !! Without this resource I wouldn't be nearly as active in buying and selling "stuff." Now, someone needs to convince me this is worth postponing retirement for. Good luck.... Ed K2MP @ Rochester emg@rfc.comm.harris.com

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: N4HUR@aol.com

Subject: Need Tube Tester Info

Message-ID: <951116165929\_24513769@mail02.mail.aol.com>

Fellow BAites, I just acquired a Hickok model 600 tube tester. Got it sight unseen via the "yellow sheet". Its in good condition, but the settings roll does not cover the older tubes, specifically '41 and 42 types which I use in a 1936 transmitter. If anyone has or knows where to obtain setting data for the older type tubes, I would greatly appreciate the information..

Bob N4HUR reply to n4hur@aol.com

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>

Subject: Packratting Old Magazines

Dave's recent Packrat post has caused me to reflect. In doing so I remembered a couple of boxes of old books and magazines I picked up in a bookstore in the small town of Canyon, Texas 23 years ago (and paid a mere pittance for it at the time as I recall). So naturally, I dug out the boxes and here's what I found:

QST's from 1932 through 1940 (mostly complete), also a few from 1927 and 1929 ARRL Handbooks from 1936 and 1946

RCA Review magazines: quarterly technical journal published by RCA, very interesting, state-of-the-art for '36 & '37

Nucleonics magazine: from late '40's and early '50's

Radio Engineer's Handbook by Terman (1943)

Transmission Lines, Antennas and Wave Guides by King, Mimno & Wing (1945) Other Radio/Electronics magazines from '50's and '60's

All this had been the property of A. Browning Clapton of Enid, OK and Amarillo, TX. No ham callsign found.

I also found stored in the same box a 1965 RCA Receiving Tube manual I had purchased new (when I was a kid back then). A few days earlier I ran across my 1964 GE transistor manual.

Obviously, this stuff seems even more fascinating now than. I now have pictures to look at showing some of the equipment I've been hearing about on BoatAnchors, such as the Super Skyrider and the Super Seven (next step down). In 1936 Hammarlund advertised the "new" Super Pro for a mere \$330 (1936 dollars!), although I noticed it discounted for \$223.44. For crystal filter add \$30. For comparison, the Super Skyrider sold for \$79.50, the HRO for \$167.70 and the RME 69 for \$118.80. Is it any wonder that Hammarlund has had such a devoted following? They were obviously top-of-the-line receivers.

I found all of this to be fairly fascinating! Almost like Christmastime. (Or maybe more like a dog finding a bone he'd forgotten about.) Noticed also in the 1936 ARRL handbook that the ARRL headquarters station callsign is W1MK.

So now you know the rest of the story behind my Archived magazines post. Regards,

Bill Sorsby, N5BU bill.sorsby@dlep1.itg.ti.com

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: n5off@w5ddl.aara.org

Subject: R-390A 16 KCS FLTR Problem Message-ID: <226840@w5ddl.aara.org>

While we are on the subject, my R-390A sounds slightly off freq in the 166 kcs position. It is an early Collins with no trimmers, just fixed caps.

Any ideas? New filter needed?

73 de tom

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: Bill VanAlstyne <bill@cruz.com>

Subject: Re: R390A Mech Filter

Message-ID: <199511160255.AA00287@cruz.com>

At 05:58 PM 11/15/95 -0600, Jan Skirrow wrote:

>I can get a filter from Fair, but I have a question about the input/output >caps. My manual shows both ends of the filter paralleled by 110pf fixed >caps. My set has the output of the three remaining filters paralleled by an >82pf cap in parallel with an 8-50pf trimmer. The input is similar, except >two of the filters have 82 pf caps, and the third a 51pf cap. All are >paralleled by 8-50pf trimmers. Can someone tell me what the fixed cap should >be for the missing 4kHz filter, and is the 51pf cap correct?

The difference between the schematic and the way your receiver is constructed reflects the presense of a documented production modification. The fixed input and output capacitors (C509 and C514) for the 4kHz filter are 82 pf. The input and output trimmers are 8-50pf and are designated C566 and C569 respectively. This data from NAVSHIPS manual 0967-063-2010 (15 Apr 1970).

>Also, I assume the trimmers are adjusted for maximum output, but am not sure.

The production mod spec contains no adjustment instructions. However, the \*original\* procedure for replacing a mechanical filter (prior to the trimmer mod) calls for a cut-and-try method using fixed silver-mica caps to establish the correct input and output capacitance. The procedure calls for a signal generator with variable output amplitude and a voltmeter across the diode load terminals on the rear panel. This procedure, as written, is typically abstruse. However, if you decode the hyper-technical gobbledygook, it basically says you tweak it for maximum smoke. Like you said. :) Geez! They make everything much too complicated. Use the crystal calibrator and the output level meter.

Good luck!

Bill VanAlstyne, N6FN bill@cruz.com

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: "Jack Giehl" <JACKG@s1.xetron.com>

Subject: Re: R390A Mech Filter

Message-ID: <1A4024B50BB@s1.xetron.com>

Dear BA enthusiasts,

Jan wrote about the R-390A filters, and I thought I would pass along some further info. When I aligned my Collins R-390A, I found that the 16 kc filter was down about 5 db from the other filters after peaking all filters for maximum signal at 455 kc. When I rotated the trimmer caps for the 16 kc filter, I noticed there was only ONE peak on the input cap. This meant that there was either too much or too little fixed parallel capacitance across the filter to resonate it. The fix was easy, and now all filters have about the same meter reading.

This generally applies to most any tuned circuit. If you get one peak with a single turn trimmer capacitor as it is rotated 360 degrees, you may not be tuned to resonance, and further circuit adjustment may be necessary.

Jack

73,

Jack, WB8BFS

jackg@xetron.com Loveland, Ohio (near Cincinnati)

\_\_\_\_\_

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: "Rhett T. George" <rtg@ee.duke.edu>

Subject: Sniperscope

Message-ID: <199511161624.LAA47222@ee.duke.edu>

Thanks to all who read my post on the sniperscope. Special thanks to Gary Pewitt, John Martin, and Tony Stalls for the details they have sent me. BA'ists are a great, knowledgeable group.

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: Michael Covington <mcovingt@ai.uga.edu>

Subject: Speaking of old magazines...

Message-ID: <199511161405.JAA08256@aisun3.ai.uga.edu>

Speaking of old magazines, if anyone out there has the Summer 1964 issue of \_Elementary Electronics\_, I'd very much like to have it... it was the first electronics magazine I ever read, and I lost my copy of it many years ago.

- -

Michael A. Covington Artificial Intelligence Center The University of Georgia Athens, GA 30602-7415 U.S.A. From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: "Jack Giehl" <JACKG@s1.xetron.com>

Subject: T-368 Available!

Message-ID: <1A4263D63E2@s1.xetron.com>

Dear (heavy) BA Enthusiasts,

I friend of mine called me last night to tell me he bought a T-368 transmitter from Fair radio. Apparently they got a shipment of them in. They had 5 units to sell Wednesday.

Lets see, I could tell my wife that its a new style microwave oven.... no, maybe a freezer that needs a little work.... hmmm, I'll have to think of something :-)

Jack

73,

\_\_\_\_\_

Jack, WB8BFS

jackg@xetron.com Loveland, Ohio (near Cincinnati)

\_\_\_\_\_

From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: bill@texan.frco.com (William Hawkins)

Subject: Tek 535 restoration

Message-ID: <9511162252.AA05815@texan.frco.com>

Looked around for the +100 volt decoupling resistors that Hank mentioned.

What I found was isolation points, where I could lift a wire from the ceramic strip and isolate an entire section, like Main Sweep, Delaying Sweep, and High Voltage. Those are the ones you can get with the scope right side up. Turned it over carefully, with gravity trying to dash it to the floor. Discovered the ceramic strips with the 10 ohm resistors and voltage test points. The load on the +100 was not as bad as I thought, from looking at the resistor on the bridge assembly. OK, Stan said to check the precision resistors that determine the regulation point. The 490K resistor to -150 was open, so the 6080 triode was cut off, and the only source of current was the 3K resistor shunting it. Dropped in a 499K and got +98 volt regulation. So, the power supplies all regulate.

Vertical position couldn't bring the spot down, so took Hank's advice and looked at pins 1 & 3 from the preamp (as long as the scope was upside down). Both pretty near +67 volts. Further apart at the cathode follower cathodes. Then I noticed the coarse vertical position adjustment inside the preamp. Couldn't hurt to try it. Brought it right within range of the front panel control. So, the vertical amp looks OK, at least at DC.

Now to find out why the sweep doesn't work. I've got a bad feeling about the range switch. Hope I'm wrong, 'cause the scope seems to be built around it (as we used to say about car radios). All of this troubleshooting has been done with a VOM, so far. May yet have to fix one of the many VTVM's bought at various places hoping to find a good one.

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From boatanchors@theporch.com Thu Nov 16 17:10:54 1995

From: w7ni@teleport.com (Stan Griffiths)
Subject: Re: Tek 575 curve tracer questions

Message-ID: <199511160632.WAA13694@desiree.teleport.com>

>Any Tektronix wizards here? I have some questions about the Tektronix >575 transistor curve tracer:

>(1) Is it normal for it to be necessary to turn the intensity all the way
>up when displaying a family of curves, or is this instrument supposed to
>have lots of intensity in reserve, like other Tek scopes?

No, it works pretty much like other Tek scopes. There should be spare intensity. You should get a good display at about 11 o'clock on the intensity control.

>(2) The other peculiarity is that the intensity control gives maximum

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>intensity when it's about 2/3 of the way up from bottom, rather than all >the way up. Turning it up farther causes the trace to become a bit >dimmer again.
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>The intensity control itself and all nearby resistors are OK. The +2400 >(PDA) and -1700 (CRT cathode) power supplies are OK. The focus and >intensity are OK.

>The most likely explanations I can think of for (1) and (2) are...
> (1) -- CRT too old?

Yep. You have a classic case of "double peak". Replace the CRT.

>(2) -- Some leakage from the intensity pot wiper (which goes to a CRT grid) >to ground? I say this because connecting a 20-meg-input meter to the wiper >makes the problem worse. I get the same maximum intensity as before, but >it occurs at an even lower setting of the potentiometer.

>Has anyone else seen this problem? Any words of wisdom?

I've seen it dozens of times. Your CRT need a new cathode but I don't know of anyone who rebuilds them.

## WORDS OF WISDOM FOLLOW:

The Tektronix part number for the standard 575 CRT with P31 phosphor is 154-0343-00. Early 575s used the 154-0097-00 with P2 phosphor. These are both green or blue-green phosphors like you are used to seeing on Tek scope. There were CRTs made to fit the 575 with many other phosphors, however, and you would be able to use the instrument with one of them installed although it may have a strange looking color to the display. Here is the whole list:

| Part Number | Phosphor                |
|-------------|-------------------------|
| 154-0093-00 | P1                      |
| 154-0097-00 | P2                      |
| 154-0102-00 | P7                      |
| 154-0103-00 | P11                     |
| 154-0129-00 | P5                      |
| 154-0162-00 | P16                     |
| 154-0176-00 | P19                     |
| 154-0330-00 | P15                     |
| 154-0343-00 | P31 (standard phosphor) |
| 154-0380-00 | P32                     |
| 154-0763-00 | P31                     |
| 154-0763-03 | P7                      |
|             |                         |

One other handy piece of information: the Tek 532, RM32, 525, 570 all used the same CRT (154-0343-00).

Here is what I would do. Look carefully at all CRTs you see in surplus stores and at used equipment dealers. Check the part numbers on the funnel. They may have one not installed in an instrument and not have the foggiest idea of what it goes into. You may get it for a buck. (That may be all it's worth if it has a double peak!)

At the same time, look for trashed parts instruments of the type in the above list that have a CRT in them. You may get lucky.

Advertise for one now that you know exactly what you are looking for.

Good luck in your search. The 575 is definitely worth the trouble.

Stan W7NI@teleport.com